

From: Grunenfelder, Gregg (DOH)
Sent: Monday, September 28, 2009 12:57 PM
To: COM SBCC Home
Subject: WSR 09-17-140 Carbon Monoxide (CO) Alarms

Peter DeVries, Council Chair
State Building Code Council

Dear Mr. DeVries and Council,

Carbon Monoxide (CO) poisoning is a serious public health issue in Washington State. Between 1990 and 2005, 1197 Washington residents died from acute exposure to CO, an average of 75 deaths per year. During this same time period, about 53 Washington residents per year were hospitalized for symptoms related to CO poisoning. The State Building Code Council's proposed new rule Requiring CO alarms in residential dwelling units is expected to prevent many needless, unintentional poisonings and deaths.

The proposed rule will require that, by specified dates, CO alarms must be installed outside of each separate sleeping area in the immediate vicinity of the bedroom in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages. Although DOH supports the rule's requirement mandating the installation of CO alarms in residences, we don't think the rule goes far enough. By limiting the rule only to dwelling units within which fuel-fired appliances are installed, an entire category of residences will be excluded and would therefore continue to be at risk.

A recently published study of the CO poisoning outbreak following the 2006 windstorm (Gulati RK, Kwan-Gett T, Hampson NB, Baer A, Shusterman D, Shandro JR, Duchin JS. Carbon monoxide epidemic among immigrant populations: King County, Washington, 2006. *Am J Public Health*. 2009 Sep;99(9):1687-92.), shows that the residential power-outage-related CO poisoning cases did not occur because of fuel-fired appliances installed in dwellings. Fully 70% of poisoned individuals were exposed to toxic levels of CO from portable generators and charcoal devices brought into the dwelling from the outside. Limiting the alarm requirement to dwellings with fuel-fired devices will leave many people unprotected.

Further evidence can be found in the newly-established "UHMS-CDC Carbon Monoxide Poisoning Surveillance" data system (see <http://www.uhms.org/CDC/tabid/418/Default.aspx>), which tracks cases treated at hyperbaric oxygen facilities. Analysis of one year of data shows that 60% of residential cases were due to installed fuel-fired appliances such as furnaces, and 40% of residential cases were due to devices brought into the dwelling (Neil Hampson, personal communication). The UHMS-CDC data include, but are not limited to cases related to power outages.

In light of this information and in order to more fully address the public health risk from CO exposure, the department of health recommends requiring CO alarms in all dwelling units as allowed by SSB 5561 (Chapter 313, Laws of 2009).

Sincerely,

Gregg Grunenfelder, Assistant Secretary
Environmental Health Division

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